

REMARKS

In the Office Action dated September 8, 2005, claims 2-11 and 13-26 were rejected under 35 U.S.C. § 103 over U.S. Patent No. 5,231,492 (Dangi) in view of U.S. Patent No. 6,434,139 (Liu).

Independent claim 9 was rejected as being obvious over Dangi and Liu. It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 9 over Dangi and Liu for at least the following reasons: (1) no motivation or suggestion existed to combine the teachings of Dangi and Liu; and (2) the references when combined do not teach or suggest *all* elements of the claim. See M.P.E.P. § 2143 (8th ed., Rev. 3), at 2100-135.

As conceded by the Office Action, Dangi does not disclose “encapsulating the data in an Internet Protocol packet.” 9/8/2005 Office Action at 3. With respect to claim 9, this concession necessarily means that Dangi fails to disclose *setting one of plural quality-of-service values in an Internet Protocol packet*, based on the determined one rate, to carry the data over the network. The Office Action cited to passages in Dangi regarding frames (having formats shown in Figs. 8 and 9 of Dangi) transmitted from a transmitting side (see Fig. 7 of Dangi). Fig. 9 shows frames having different header values for different coding rates. However, as correctly noted by the Office Action, the frames of Dangi are not Internet Packet packets, and the headers containing the different values depicted in Fig. 9 of Dangi do *not* constitute quality-of-service values in an Internet Protocol packet as recited in claim 9. In fact, it is clear that the system of Dangi includes a traditional *circuit-switched* communications network that is capable of communicating audio and video data. Reference is made in various passages of Dangi to “terminal offices” (see Dangi, 5:64, 6:27-28, 6:50-51, and so forth), which refer to central offices used in a conventional circuit-switched network, such as a PSTN.

Recognizing that Dangi fails to disclose the subject matter of claim 9, the Office Action relied upon Liu for its teaching regarding Internet Protocol packets. However, although Liu refers to performing voice coding, there is absolutely no suggestion in Liu of setting one of plural quality-of-service values in an Internet Protocol packet based on a determined rate to carry data over a network. In fact, in Fig. 1 of Liu, subscriber devices 4 and 6 are connected by local loops 16 to end offices (EO) 12, 14. Liu, 3:67-4:4. The local loops 16 refer to conventional circuit-switched lines between subscriber devices and end office of a PSTN. Clearly, these

circuit-switched lines are incapable of supporting Internet Protocol packets. Fig. 2 of Liu also shows subscriber devices 4 and 6 coupled by local loops 16 to end offices 12, 14. In addition, Fig. 2 of Liu depicts a mobile radio unit 30 that communicates with a cell base station 32, which in turn communicates with a mobile switching center 34. The wireless network including the mobile radio unit 30, the base station 32, and mobile switching center 34 of Liu is a circuit-switched wireless network. In column 5 of Liu, a description is made regarding digital wireless frames sent by the radio unit 30 to the base station 32, which are routed to a mobile switching center 34, which converts the received information into PCM digital wireline format that can be routed to PSTN 8. Liu, 5:41-58. This teaching by Liu is a clear indication that the traffic in the wireless network is circuit-switched traffic. Another indication that the traffic is circuit-switched traffic is the terminology of "mobile switching center" used in Fig. 2 of Liu, which is understood by persons skilled in the art to be a circuit-switched node of a wireless network.

Fig. 3 of Liu similarly shows a circuit-switched wireless network including the mobile switching center 34. Thus, since the subscriber devices and radio unit 30 of Liu communicate over circuit-switched links, such subscriber devices and radio units clearly would be unable to set one of plural quality-of-service values in an *Internet Protocol packet* based on a determined rate. Therefore, it is respectfully submitted that the hypothetical combination of Dangi and Liu does not teach or suggest at least the following element of claim 9: set one of plural quality-of-service values in an Internet Protocol packet, based on the determined one rate, to carry the data over the network. The *prima facie* case of obviousness is defective for at least this reason.

Moreover, a person of ordinary skill in the art would not have been motivated to combine the teachings of Dangi and Liu to arrive at the claimed invention. Although Liu shows a packet data network 10 over which VoIP communications can be performed, this teaching does not provide any suggestion of setting one of plural quality-of-service values in an IP packet based on a determined rate. Note that Dangi sets the different values of the header in the frames depicted in Fig. 9 of Dangi at the transmitting side. In Liu, the transmitting side includes either the subscriber devices 4 and 6 or the mobile radio unit 30 that are coupled by circuit-switched links (local loop or wireless link), where IP packets *cannot* be communicated. Thus, there would have

been no reason or desirability to set quality-of-service values in an IP packet by an originating device such as the subscriber devices 4 and 6 or mobile radio unit 30 of Liu. In view of the foregoing, it is respectfully submitted that a person of ordinary skill in the art would not have been motivated to combine the teachings of Dangi and Liu. The *prima facie* case of obviousness is defective for this additional reason.

Amended independent claim 4 is similarly allowable over the asserted combination of Dangi and Liu.

Independent claim 5 has been amended to improve its form, with the scope of claim 5 remaining *unchanged*. Claim 5 is also allowable over Dangi and Liu for reasons similar to those of claim 9.

Independent claims 15 and 16 are also similarly allowable over Dangi and Liu.

With respect to independent claim 23, the Office Action cited Fig. 25 and column 10, lines 18-21, of Dangi as teaching the recited queues. Note that Fig. 25 is at the transmitting side, and that interfaces 25₁-25₈ are used to store output audio data from adaptive coding units 2₁ to 2₈ prior to transmission over a transmission line. There is no teaching or suggestion in Dangi of a controller to store each IP packet in one of the plurality of queues based on a quality-of-service indicator value in the IP packet. With respect to Liu, which was combined with Dangi to reject claim 23, the teachings regarding the use of the data network for VoIP communications does not provide any suggestion of modifying the interfaces 25₁-25₈ of Dangi to store IP packets based on quality-of-service indicator values in the IP packets. Therefore, a *prima facie* case of obviousness has clearly not been established with respect to claim 23.

Appln. Serial No. 09/848,902
Amendment Dated December 7, 2005
Reply to Office Action Mailed September 8, 2005

Dependent claims are allowable for at least the same reasons as corresponding independent claims. Allowance of all claims is therefore respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0094US).

Respectfully submitted,

Date: _____

Dec. 7, 2005



Dan C. Hu
Registration No. 40,025
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, TX 77024
Telephone: (713) 468-8880
Facsimile: (713) 468-8883